Claims

- 1. A valve actuator control device adapted to control the position of a valve actuator by means of solenoid valves, in which if the actuator position deviates from a desired position, but remains within a predetermined distance from said desired position, the control device is adapted to only return the actuator to the desired position after a delay period, thereby to increase the life span of said solenoid valves.
- 2. A valve actuator control device as claimed in Claim 1 in which the control device comprises an electronic program adapted to control the position of a valve actuator.
- 3. A valve actuator control device as claimed in Claim 2 in which the predetermined distance is divided into a number of sections, and in which a different delay period is applied when the actuator is positioned in each section.
- 4. A valve actuator control device as claimed in Claim 3 in which the delay periods decrease in duration as the distance between the desired position and the actuator position increases in size.
- 5. A valve actuator control device as claimed in Claim 4 in which the valve actuator provides a rotational movement, and in which the desired position is a point or a section in the actuator's range of rotational movement, and each section of the predetermined distance is a band of rotational movement in either direction from the desired position.
- 6. A valve actuator control device as claimed in Claim 5 in which the desired position is a 0.7 degree wide band within the actuator's range of rotational movement, and each section of the predetermined distance is a 0.7 degree wide band, and in which the predetermined distance is divided into four 0.7 degree wide bands.

WO 2004/023227 PCT/GB2003/003872

-7-

7. A valve actuator control device as claimed in Claim 6 in which the control device is adapted to delay movement of the actuator to the desired position for 13 seconds when the actuator is positioned in the first 0.7 degree wide band outside the desired position, for 7 seconds in the second band, for 4 seconds in the third band and for 2 seconds in the fourth band, and in which when the actuator is positioned outside the predetermined distance there is no delay in movement of the actuator to the desired position.

- 8. A valve actuator control device as claimed in Claim 7 in which if the actuator position changes from a first band to a second band, and a first delay period changes to a second delay period, the time which elapsed during the first delay period is subtracted from the second delay period.
- 9. A valve actuator control device as claimed in any of the preceding Claims in which the desired position is set via a control means accessible by an operator of the valve actuator, and/or an active pressure monitoring means downstream of a flow valve which is controlled by said actuator.
- 10. A valve actuator control device as claimed in any of the preceding Claims in which a potentiometer connected to a valve stem extending from the flow valve provides the actuator position to the control device.

\$.